

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) In a server device, a method for processing an encoded data stream wherein said encoded data stream is non-preemptable and subject to precedence constraints, said method comprising ~~the steps of~~:

[[a)] assigning a processor setting to a task in a plurality of tasks, wherein said processor setting corresponds to a setting used by a processor of a client device to execute said task and wherein said task decodes without preemption a frame of said encoded data stream;

[[b)] generating an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing at said client device said plurality of tasks according to ~~said~~ precedence constraints that fix the order for executing at least a subset of said tasks; and

[[c)] transmitting to said client device said execution schedule and said processor setting.

2. (Original) The method as recited in Claim 1 wherein said processor setting comprises a voltage amount used by said processor to execute said task.

3. (Original) The method as recited in Claim 1 wherein said processor setting comprises a processor clock speed at which said processor executes said task.

4. (Original) The method as recited in Claim 1 wherein said processor of said client device operates using a discrete variable-voltage power supply.

5. (Currently Amended) The method as recited in Claim 1 wherein said encoded data stream comprises an audio portion and a video portion, said video portion comprising a first frame and a second frame, wherein decoding of said first frame is dependent on decoding of said second frame.

6. (Currently Amended) The method as recited in Claim 1 comprising ~~the steps of~~:
assigning a processor setting to each task in said plurality of tasks;
and
transmitting said processor setting for said each task to said client device.

7. (Currently Amended) The method as recited in Claim 1 wherein said ~~step of~~ generating said execution schedule is independent of client device type.

8. (Currently Amended) The method as recited in Claim 1 wherein said step of generating said execution schedule comprises ~~the steps of~~:
generating different sequences for executing a subset of said plurality of tasks; and
selecting a sequence that results in minimum energy use by said processor of said client device.

9. (Currently Amended) The method as recited in Claim 1 comprising ~~the step of~~:
transmitting said encoded data stream to said client device with said execution schedule and said processor setting.

10. (Currently Amended) A computer system comprising:
a bus;
a memory unit coupled to said bus;
a communication interface coupled to bus and operable to establish a communication link with a client device; and
a processor coupled to said bus, said processor for executing a method for processing an encoded data stream wherein said encoded data stream is non-preemptable and subject to precedence constraints, said method comprising the steps of:
[[a)] assigning a processor setting to a task in a plurality of tasks, wherein said processor setting corresponds to a setting used by a processor of said client device to execute said task and wherein said task decodes without preemption a frame of said encoded data stream;
[[b)] generating an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing at said client device said plurality of tasks according to said precedence constraints that fix the order for executing at least a subset of said tasks; and
[[c)] transmitting to said client device said execution schedule and said processor setting.

11. (Original) The computer system of Claim 10 wherein said processor setting comprises a voltage amount used by said processor of said client device to execute said task.

12. (Original) The computer system of Claim 10 wherein said processor setting comprises a processor clock speed at which said processor of said client device executes said task.

13. (Original) The computer system of Claim 10 wherein said processor of said client device operates using a discrete variable-voltage power supply.

14. (Currently Amended) The computer system of Claim 10 wherein said encoded data stream comprises an audio portion and a video portion, said video portion comprising a first frame and a second frame, wherein decoding of said first frame is dependent on decoding of said second frame.

15. (Currently Amended) The computer system of Claim 10 wherein said method comprises ~~the steps of:~~

assigning a processor setting to each task in said plurality of tasks;
and

transmitting said processor setting for said each task to said client device.

16. (Currently Amended) The computer system of Claim 10 wherein said ~~step of~~ generating said execution schedule is independent of client device type.

17. (Currently Amended) The computer system of Claim 10 wherein said step b) of said method comprises ~~the steps of:~~

generating different sequences for executing a subset of said plurality of tasks; and

selecting a sequence that results in minimum energy use by said processor of said client device.

18. (Currently Amended) The computer system of Claim 10 wherein said method comprises ~~the step of:~~

transmitting said encoded data stream to said client device with said execution schedule and said processor setting.

19. (Currently Amended) A computer-usable medium having computer-readable program code embodied therein for causing a computer system to perform a method of processing an encoded data stream, said method comprising the steps of:

[[a)] assigning a processor setting to a task in a plurality of tasks, wherein said processor setting corresponds to a setting used by a processor of a client device to execute said task and wherein said task decodes without preemption a frame of said encoded data stream;

[[b)] generating an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing at said client device said plurality of tasks according to said precedence constraints that fix the order for executing at least a subset of said tasks; and

[[c)] transmitting to said client device said execution schedule and said processor setting.

20. (Original) The computer-usable medium of Claim 19 wherein said processor setting comprises a voltage amount used by said processor to execute said task.

21. (Original) The computer-usable medium of Claim 19 wherein said processor setting comprises a processor clock speed at which said processor executes said task.

22. (Original) The computer-usable medium of Claim 19 wherein said processor of said client device operates using a discrete variable-voltage power supply.

23. (Currently Amended) The computer-usable medium of Claim 19 wherein said encoded data stream comprises an audio portion and a video portion, said video portion comprising a first frame and a second frame, wherein decoding of said first frame is dependent on decoding of said second frame.

24. (Currently Amended) The computer-usable medium of Claim 19 wherein said computer-readable program code embodied therein causes a computer system to perform said method comprising the steps of:

assigning a processor setting to each task in said plurality of tasks;
and

transmitting said processor setting for said each task to said client device.

25. (Original) The computer-usable medium of Claim 19 wherein said step of generating said execution schedule is independent of client device type.

26. (Currently Amended) The computer-usable medium of Claim 19 wherein said computer-readable program code embodied therein causes a computer system to perform said method comprising the steps of:

generating different sequences for executing a subset of said plurality of tasks; and

selecting a sequence that results in minimum energy use by said processor of said client device.

27. (Currently Amended) The computer-usable medium of Claim 19 wherein said computer-readable program code embodied therein causes a computer system to perform said method comprising the step of:

transmitting said encoded data stream to said client device with said execution schedule and said processor setting.

28. (Currently Amended) In a client device, a method for decoding an encoded data stream, said method comprising ~~the steps of:~~

[[a)] receiving said encoded data stream, wherein said encoded data stream is non-preemptable and subject to precedence constraints that fix the order for executing at least a subset of said tasks;

[[b)] receiving an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing a plurality of tasks according to said precedence constraints, wherein a task decodes without preemption a frame of said encoded data stream; and

[[c)] receiving a processor setting for each task in said plurality of tasks, wherein said processor setting specifies a setting used by a processor of said client device to execute a respective task.

29. (Original) The method as recited in Claim 28 wherein said processor setting comprises a voltage amount used by said processor of said client device to execute said task.

30. (Original) The method as recited in Claim 28 wherein said processor setting comprises a processor clock speed at which said processor of said client device executes said task.

31. (Original) The method as recited in Claim 28 wherein said processor of said client device operates using a discrete variable-voltage power supply.

32. (Currently Amended) The method as recited in Claim 28 wherein said encoded data stream comprises an audio portion and a video portion, said video portion comprising a first frame and a second frame, wherein decoding of said first frame is dependent on decoding of said second frame.